CH.A.M.P. – A PROGRAM FOR CHAT MODELING AND ASSESSMENT

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Rezumat. Lucrarea propune o metodă și un sistem implementat de evaluare a competențelor participanților din cadrul unui mediu colaborativ de tip chat. În cadrul mecanismului de notare au fost luate in calcul metrici specifice rețelelor sociale, au fost folosite tehnici de text-mining, prelucrarea limbajului natural și analiză semantică latentă (LSA – Latent Semantic Analysis). Modelul pentru interacțiunea între participanți, evoluția și notarea lor joacă un rol important în vizualizarea rezultatelor analizei. Un alt sistem a fost dezvoltat pentru a permite evaluarea manuală a fiecărui chat în vederea obținerii unui corpus de referință ("golden standard") și în vederea învățării din corpus folosind LSA și Wordnet.

Abstract. The paper describes a method and an implemented system used for evaluating participants' competencies in a chat collaborative environment. The assessment provides a grading mechanism based upon social network metrics, text mining, natural language pragmatics and latent semantic analysis. The model for participant interaction, evolution and grading plays an important role in the visualization of the analysis results. Another system has been developed in order to manually evaluate each chat and obtain the "golden standard" and learn from the corpus using LSA and WordNet.

Keywords: Computer-Supported Collaborative Learning, chat, polyphony, evaluation, annotation, social networks, semantic web, Latent Semantic Analysis

1. Introduction

As the web evolved into a social environment, other communication channels were developed allowing users to exchange ideas, thoughts and information worldwide.

In this context instant messaging and forums emerged becoming a viable alternative to classic learning: Computer Supported Collaborative Learning [7, 9]. However, new difficulties involving manual chat analysis appeared because of the large amount of information and an automatic system's help would be required.

For example, a professor's evaluation is an extremely time consuming process and social networks and natural language processing would be helpful.

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